

Model: VM Option Type B		Date:10-Jul-06	No.: RB782001
Subject: Firmware update procedure for VM Option		Prepared by: K. Moriizumi	
From: 1st Tech. Support Sec. Service Support Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input checked="" type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input type="checkbox"/> Other ()	

Firmware Update Procedure (SD Card Only) for the VM Option

Important:

- The following procedure is for updating the firmware for the VM option platform **on the SD card only**.
- Firmware for VM option platforms that are already installed on a machine **cannot be updated**. So, **do not try** to overwrite the VM option platform if it is already installed on the machine.

Do the following procedure to update the VM option platform firmware on the SD card.

1. Save the “**sdk**” folder that contains the new platform firmware for the VM Option in the HDD of a PC.
2. Insert the VM Option SD card into the SD card reader connected to the PC.
3. Upload (overwrite) the new “**sdk**” folder to the SD card.

Important: If you want to update the VM option platform that is already installed on the machine, check with the third-party vendor(s) that developed the SDK applications installed. This is because the SDK applications may not support some VM option platform versions.

Model: VM Option TypeB		Date: 4-Jun-07	No.: RB782002
Subject: Version information to support models		Prepared by: K. Moriizumi	
From: 1st Tech. Support Sec. Service Support Dept.			
Classification:	<input checked="" type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input checked="" type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input type="checkbox"/> Other ()	

The following are the versions of the VM Option supported by each model.

Type A (G82117)

Model Name:	Product Code:	Supported Version:
G-P1	G104/105	Version 1.10 or later
K-P4	G116	Version 1.10 or later
C-P2	G112/G113	Version 1.10 or later
MT-P1	G126	Version 1.20 or later
J-P4	G130/131	Version 1.20 or later
AR-P2	G139/G149	Version 1.30 or later

Type B (B78217)

Model Name:	Product Code:	Supported Version:
MT-C2	B163/B140/B141	Version 1.10 or later
V-C1	B132/B181/B200	Version 1.10 or later
J-C2	B178/B180/B202	Version 1.10 or later
Th-C1	B156/B220	Version 1.10 or later
Dolphin-C2	B188	Version 1.10 or later
R-C4	B205/B209	Version 1.20 or later
A-C4	B195/B198	Version 1.21 or later
R-C4.5	D007/D008	Version 1.41 or later
A-C4.5	B291/B295/B296/B297	Version 1.42 or later

Model: VM Option TypeB

Date: 4-Jun-07

No.: RB782002

Type C (B86101)

Model Name:	Product Code:	Supported Version:
B-C3	B234/B235/B236	Version 2.03 or later
AT-C1	B230/B237	Version 2.05 or later
AP-C1	B222/B224	Version 2.05 or later
MT-C3	B246/B248/B249	Version 2.05 or later

Type D (G87407)

Model Name:	Product Code:	Supported Version:
PG-C1	B229	Version 2.03 or later
G-P2	G160/G161	Version 2.04 or later
A-P4	G147	Version 2.05 or later
MT-P2	G148	Version 2.05 or later
K-C3	B276/B277	Version 2.06 or later
AP-P1	G133	Version 2.08 or later

Model: Model K-C3/GW Option		Date: 6-Jul-07	No.: RB867001
Subject: Service manual correction		Prepared by: Y.Yoshida	
From: 1st Tech. Support Sec. Service Support Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input checked="" type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input type="checkbox"/> Other ()	

The service manual was corrected as follows:

- **Replace** the installation procedure for the VM option. B867, page 18

New:

1. Remove the slot cover [A] from SD card slot 3.
2. Turn the SD-card label face to the rear of the machine. Then push it slowly into slot 3 [B] until you hear a click.
3. Turn on the main power switch.
 - Note:** After you turn on the main power switch, the Java platform will be installed automatically.
4. Reattach the slot cover [A].

Important:

- Do not remove the VM option SD card after installation. Keep the SD card in slot 3.
- For third vendor Java-based SDK applications, you can remove the SD card after installation. For the installation procedure, see the vendor’s installation manual.

Old:

1. Remove the slot cover [A] from the SD card slot 3
2. Turn the SD-card label face to the rear of the machine. Then push it slowly into slot 3 [B] until you hear a click.
3. Turn on the main power switch.
4. Follow the vendor's installation procedure.
5. After installing, turn off the main power switch
6. Remove the SD card from slot 3.
7. Attach the slot cover [A]

Model: VM Option TypeB		Date: 27-Jun-07	No.: RB782003
Subject: Firmware update procedure for VM option		Prepared by: K. Moriizumi	
From: 1st Tech. Support Sec. Service Support Dept.			
Classification:	<input checked="" type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input checked="" type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input type="checkbox"/> Other ()	

Firmware Update Procedure for the VM card Option Type B

Do the following procedure to update the VM card Option firmware.

Tools

PC with Windows2000/XP

SD card writer: B6456820

Procedure

Application halt

1. Press "User Tools/Counter" key, then press the "Extended Feature Settings" button and press the "Extended Feature Setting" button that appears. If required, log in as a machine administrator.
2. Press "Administrator Tools", then press "Heap/Stack Size Settings". Take note of the heap size and stack size. (After updating, the heap and stack size settings are cleared.)
3. Press "Startup", then stop all applications.
Important: The following problems can occur if the VM firmware is updated without the application halt.
 - The VM firmware update fails.
 - All settings for the application are cleared.
4. Turn the main power off, then remove the SD card slot cover, and remove the VM SD card from the SD card slot.

Updating the VM SD card

1. Insert the SD card into an SD card writer that is connected to a PC.
2. Make sure which drive is assigned for the SD card.
3. Decompress the downloaded update file. There should be two files; one is an ".exe" file and the other is a ".bat" file.
4. Double click the ".bat" file. The command prompt screen appears.

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5. The first command line is shown as
“Please input drive letter of SD card [a – x]:”
Then enter the SD card drive name, and press the “Enter” key.
6. “Press any key to continue...” appears, then press the “Enter” key again. The updating to the SD card starts.
7. “Press any key to continue...” appears again, then press the “Enter” key. The command prompt screen disappears automatically if the updating is successful.
8. Remove the SD card from the SD card writer after the access lamp on the SD card writer goes off.
9. Insert the SD card in the SD card slot of the machine and turn the main power on.

Starting the application

1. Press “User Tools/Counter” key, then press the “Extended Feature Settings” and press “Extended Feature Settings” that appears. If required, log in as a machine administrator.
2. Press “Startup”, then change the status to “Starting up” for each application.
3. Press “Administrator Tools”, then press “Heap/Stack Size Settings”. Program the heap size and stack size with the same settings as before.
4. Turn the main power off and on.
5. Enter the “Extended Feature Settings” menu again, and check the version of the VM card firmware on the “Extended Feature Info” screen.
Note: The version of the VM card firmware is also shown on the Self Diagnostic Report (a part of the SMC report). But the version on the Self Diagnostic Report is not changed after updating.

Model: VM Option TypeB	Date: 4-Nov-07	No.: RB782004
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Subject: Firmware Release Note: VM card option Type B		Prepared by: K. Moriizumi	
From: 1st Tech. Support Sec. Service Support Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input checked="" type="checkbox"/> Other ()		

This RTB has been issued to announce the firmware release information for the VM card Type B (libcvm).

Version	Program No.	Effective Date
1.43	B7875200H	January 2007 production
1.42	B7875200G	November 2006 production
1.41	B7875200F	August 2006 production
1.40	B7875200E	July 2006 production
1.30	B7875200D	August 2005 production
1.22	B7875200C	July 2005 production
1.21	B7875200B	May 2005 production
1.20	B7875200A	March 2005 production
1.10	B7875200	1st Mass production.

Version	Modified Points or Symptom Corrected
1.43	<p>Symptom corrected:</p> <ol style="list-style-type: none"> The machine does not recover from Energy Saver mode when accessed by a server application. A memory leak occurs if an application that contains several JAR files is repeatedly enabled/disabled. <p>Other changes:</p> <ol style="list-style-type: none"> The software keyboard inside the application can be used in the language that has been selected as the machine's main display language.
1.42	<p>Symptom corrected:</p> <ol style="list-style-type: none"> Scan Router V2/EX and Desk Top Binder – Smart Device Monitor for Client cannot connect to the machine if SSL has been disabled. The "kXml2" package library cannot be used. European display languages cannot be used inside the application (even when selected).
1.41	<p>Symptom corrected:</p> <p>RFU cannot be performed if the firmware file is large.</p>
1.40	<p>Other changes:</p> <p>Supports the following J2E option libraries: JCE/JSSE/JAAS/RMI/JDBC/WSA.</p>
1.30	<p>Other changes:</p> <p>Minor changes made for the Japanese model.</p>
1.22	<p>Other changes:</p> <p>Minor changes made for the Japanese model.</p>

Model: VM Option TypeB		Date: 4-Nov-07	No.: RB782004
Version	Modified Points or Symptom Corrected		
1.21	Other changes: Minor changes made for the release of the A-C4		
1.20	Other changes: Minor changes made for the release of the R-C4		
1.10	1st Mass production.		

Reissued: 07-Dec-07

Model: VM Option TypeB	Date: 4-Nov-07	No.: RB782004a
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RTB Reissue

The items in bold italics have been added.

Subject: Firmware Release Note: VM card option Type B		Prepared by: K. Moriizumi	
From: 1st Tech. Support Sec. Service Support Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input checked="" type="checkbox"/> Other ()		

This RTB has been issued to announce the firmware release information for the VM card Type B (libcvm).

Version	Program No.	Effective Date
1.44	B7825200J	December 2007 production
1.43	B7875200H	January 2007 production
1.42	B7875200G	November 2006 production
1.41	B7875200F	August 2006 production
1.40	B7875200E	July 2006 production
1.30	B7875200D	August 2005 production
1.22	B7875200C	July 2005 production
1.21	B7875200B	May 2005 production
1.20	B7875200A	March 2005 production
1.10	B7875200	1st Mass production.

Version	Modified Points or Symptom Corrected
1.44	Other changes: - Supports Activation.
1.43	Symptom corrected: 1. The machine does not recover from Energy Saver mode when accessed by a server application. 2. A memory leak occurs if an application that contains several JAR files is repeatedly enabled/disabled. Other changes: 3. The software keyboard inside the application can be used in the language that has been selected as the machine's main display language.
1.42	Symptom corrected: 1. Scan Router V2/EX and Desk Top Binder – Smart Device Monitor for Client cannot connect to the machine if SSL has been disabled. 2. The "kXml2" package library cannot be used. 3. European display languages cannot be used inside the application (even when selected).
1.41	Symptom corrected: RFU cannot be performed if the firmware file is large.

Reissued: 07-Dec-07

Model: VM Option TypeB		Date: 4-Nov-07	No.: RB782004a
Version	Modified Points or Symptom Corrected		
1.40	Other changes: Supports the following J2E option libraries: JCE/JSSE/JAAS/RMI/JDBC/WSA.		
1.30	Other changes: Minor changes made for the Japanese model.		
1.22	Other changes: Minor changes made for the Japanese model.		
1.21	Other changes: Minor changes made for the release of the A-C4		
1.20	Other changes: Minor changes made for the release of the R-C4		
1.10	1st Mass production.		

Reissued: 16-Jul-08

Model: VM Option TypeB	Date: 4-Nov-07	No.: RB782004b
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RTB Reissue

The items in bold italics have been added.

Subject: Firmware Release Note: VM card option Type B		Prepared by: K. Moriizumi	
From: 1st Tech. Support Sec. Service Support Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input checked="" type="checkbox"/> Other ()		

This RTB has been issued to announce the firmware release information for the VM card Type B (libcvm).

Version	Program No.	Effective Date
1.45	<i>B7825200K</i>	<i>July 2008 production</i>
1.44	B7825200J	December 2007 production
1.43	B7875200H	January 2007 production
1.42	B7875200G	November 2006 production
1.41	B7875200F	August 2006 production
1.40	B7875200E	July 2006 production
1.30	B7875200D	August 2005 production
1.22	B7875200C	July 2005 production
1.21	B7875200B	May 2005 production
1.20	B7875200A	March 2005 production
1.10	B7875200	1st Mass production.

Version	Modified Points or Symptom Corrected
1.45	<i>Other changes: (Minor changes applied for DSDK application developers).</i>
1.44	Other changes: - Supports Activation.
1.43	Symptom corrected: 1. The machine does not recover from Energy Saver mode when accessed by a server application. 2. A memory leak occurs if an application that contains several JAR files is repeatedly enabled/disabled. Other changes: 3. The software keyboard inside the application can be used in the language that has been selected as the machine's main display language.
1.42	Symptom corrected: 1. Scan Router V2/EX and Desk Top Binder – Smart Device Monitor for Client cannot connect to the machine if SSL has been disabled. 2. The "kXml2" package library cannot be used. 3. European display languages cannot be used inside the application (even when selected).

Reissued: 16-Jul-08

Model: VM Option TypeB	Date: 4-Nov-07	No.: RB782004b
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Version	Modified Points or Symptom Corrected
1.41	Symptom corrected: RFU cannot be performed if the firmware file is large.
1.40	Other changes: Supports the following J2E option libraries: JCE/JSSE/JAAS/RMI/JDBC/WSA.
1.30	Other changes: Minor changes made for the Japanese model.
1.22	Other changes: Minor changes made for the Japanese model.
1.21	Other changes: Minor changes made for the release of the A-C4
1.20	Other changes: Minor changes made for the release of the R-C4
1.10	1st Mass production.

Model: VM Option TypeB		Date: 26-Nov-08	No.: RB782005
Subject: HDD format procedure with DSDK application		Prepared by: K. Moriizumi	
From: 1st Tech. Support Sec. Service Support Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input checked="" type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input type="checkbox"/> Other ()	<input checked="" type="checkbox"/> Tier 2

Do the following to format the HDD when a DSDK application is installed:

1. Check the VM type.

- For the following VM types, do **Procedure 1** on the next page.
 - Type A (ver.1.x)
 - Type B (ver.1.x)
 - Type C (before ver.2.14)
 - Type D (before ver.2.14)
 - Type F (ver.4.0x)
 - Type G (ver.4.0x)
 - Type H (before ver.4.13)
 - Type I (before ver.4.13)
 - Type J (before ver.5.01)

- For the following VM types, do **Procedure 2** on the next page.
 - Type C (after ver.2.15)
 - Type D (after ver.2.15)
 - Type H (after ver.4.14)
 - Type I (after ver.4.14)
 - Type J (after ver.5.02)

2. Check the installation location of the DSDK application.

- If the DSDK application is installed on the HDD, do **Procedure 1** on the next page.

Procedure 1:

1. Back up any settings and data that the DSDK application has stored on the HDD.
2. Disable and uninstall all DSDK applications.
3. Turn off the machine main power.
4. Remove the Java VM card from the service slot (Slot 2 on most machines).
5. Turn on the machine main power.
6. Format the HDD with **SP5-832-001**.
7. Turn off the machine main power.
8. Reinsert the Java VM card into the service slot.
9. Turn on the machine main power.
10. Install the DSDK application and restore the settings and data backed up in Step 1 to the HDD.

Procedure 2:

1. Back up any settings and data that the DSDK application has stored on the HDD.
2. Disable all DSDK applications.
3. Format the HDD with **SP5-832-001**.
4. Turn the machine main power off/on.
5. Restore the settings and data backed up in Step 1 to the HDD.

Model: VM Option TypeB		Date: 26-Nov-08	No.: RB782006
Subject: Main frame firmware updating procedure		Prepared by: K. Moriizumi	
From: 1st Tech. Support Sec. Service Support Dept.			
Classification:	<input checked="" type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input checked="" type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input type="checkbox"/> Other ()	<input checked="" type="checkbox"/> Tier 2

Do the following to update the firmware if a DSDK application is installed.

Note: You do not need to uninstall the DSDK application in order to update the firmware.

Check the SDK application.

- When the DSDK application is Card Authentication Package, do **Procedure 1**.
- When the DSDK application is not Card Authentication Package, do **Procedure 2**.

Procedure 1:

1. Turn off "Enhanced Authentication Management".
2. Turn off the machine main power.
3. Remove the Java VM card from the service slot (Slot 2 on many models).
4. Insert the SD card containing the firmware into the service slot.
5. Turn on the machine main power.

Note: The firmware will automatically be updated as the machine boots up.

6. Turn off the machine main power.
7. Remove the SD card from the service slot.
8. Reinsert the Java VM card into the service slot.
9. Turn on the machine main power.
10. Turn on "Enhanced Authentication Management".

Procedure 2:

1. Turn off the machine main power.
2. Remove the Java VM card from the service slot (Slot 2 on many models).
3. Insert the SD card containing the firmware into the service slot.
4. Turn on the machine main power.

Model: VM Option TypeB	Date: 26-Nov-08	No.: RB782006
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Note: The firmware will automatically be updated as the machine boots up.

5. Turn off the machine main power.
6. Remove the SD card from the service slot.
7. Reinsert the Java VM card into the service slot.
8. Turn on the machine main power.